INTESTINAL PARASITES AND ANTIPARASITIC PROTOCOLS IN URBAN DOGS

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OBJECTIVES

- To detect the intestinal parasite prevalence in dogs living in urban environments, optimal sanitary hygiene conditions and which play an exclusive role as pet animals.
- To know which antiparasitic protocols were most commonly used in this canine population and to evaluate possible risk factors concerning food and habits.

MATERIAL AND METHODS

- Samples: Fecal samples were collected from urban dogs older than 6 months and which received no antiparasitic treatment over the 3 months prior to sampling.
- Survey: owners were asked about the antiparasitic protocol, including products used; frequency; last treatment: date and objective (prophylactic or therapeutic); and last coprological examination for parasite detection. They were also asked about possible risk factors such as food or habits.
- Coprological analysis
  - Centrifugation-flotation technique using two different solutions: Zinc Sulphate (δ=1.18) and Saccharose (δ=1.25)

RESULTS

- 75 samples were collected.
- Parasite infection was detected in 2 samples:
  - Prevalence: 2.6% (2/75).
  - Parasites detected: *Trichuris vulpis* and *Giardia spp*

Figure. 1: Trichuris vulpis egg (x60)

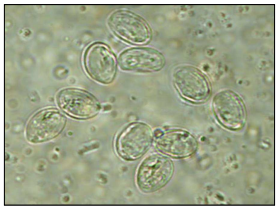


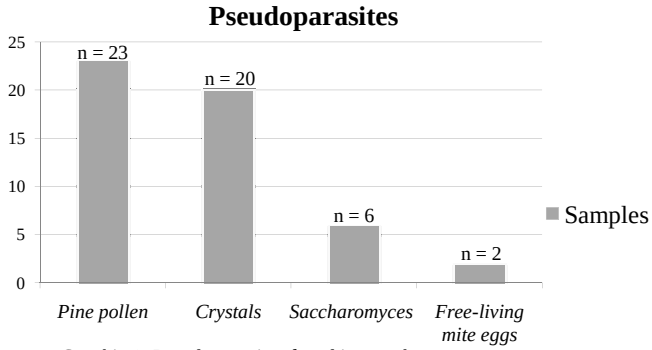
Figure. 2: Giardia spp cysts (x60)

- Antiparasitic products and frequency of treatment

ANTIPARASITIC TREATMENT	No. DOGS	%
Endoparasites treatment	12	16
Ectoparasites treatment	9	12
Endoparasites and ectoparasites treatment	48	64
Unknown products	4	5.3
No treatment	2	2.7
TOTAL	75	100

FREQUENCY ENDOPARASITES TREATMENT	No. DOGS	%
Never	11	14.7
3 – 4 months	24	32
6 months	22	29.3
12 months	6	8
Occasionally	6	8
Post coprological control	2	2.7
Unknown products	4	5.3
TOTAL	75	100

- Pseudoparasites detected in fecal examination



Graphic 1: Pseudoparasites found in samples.

Figure 3: Saccharomyces (x60)

Figure 4: Crystals (x60)

Figure 5: Pine pollen (x60)

Figure 6: Free-living mite eggs (x60)

CONCLUSIONS

- Intestinal parasite prevalence detected in urban dogs in the present study is low.
- Pseudoparasites were detected in 57.4% (43/75) of the samples.
- Most deworming protocols were applied without any previous coprologial control.
- Antiparasitic protocols could be based on previously coprological control results. In addition, vet clinicians should encourage owner's education regarding prophylaxis.